





New Features Guide

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PortaSwitch: New Features Guide, December 2013 Maintenance Release 38 V1.38.4

Please address your comments and suggestions to: Sales Department, PortaOne, Inc. Suite #408, 2963 Glen Drive, Coquitlam BC V3B 2P7 Canada.

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Preface

PortaSwitch® Maintenance Release 38 is the next leap-forward release, consistent with our "fast releases, precisely on time" ideology introduced in 2012.

Where to get the latest version of this guide

The hard copy of this guide is updated upon major releases only and does not always contain the latest material on enhancements introduced between major releases. The online copy of this guide is always up-to-date and integrates the latest changes to the product. You can access the latest copy of this guide at: www.portaone.com/support/documentation/.

Conventions

This publication uses the following conventions:

Commands and keywords are given in **boldface**

The **exclamation mark** draws your attention to important information or actions.

NOTE: Notes contain helpful suggestions about or references to materials not contained in this manual.

Timesaver means that you can save time by performing the action described here.



4

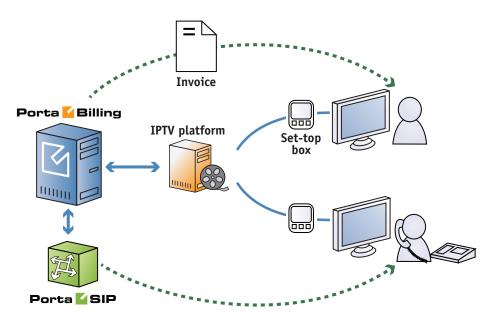
Tips provide information that might help you solve a problem.

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Matrix IPTV Integration

For today's service providers, "triple play" is not just a buzzword - rather, it is the only way to stay competitive and retain their customer base. Combined solution provided by PortaOne in conjunction with an IPTV platform can be used to add IPTV to your service portfolio and expand your business growth.



An IPTV platform normally includes a content delivery network, a services framework, application servers and client portals. Together they enable the acquisition, storage, distribution, caching and delivery of content to a variety of devices; the management of content workflow; rights management and royalty reporting to rights owners; and the delivery of IPTV content to various applications (such as set-top boxes).

PortaBilling® is a converged real-time billing system, service provisioning environment and CRM used for rating and invoicing any type of service you provide to customers, with centralized funds management and consolidated bills.

The administrator can define multiple channel packages for IPTV in the IPTV platform. These are then imported into PortaBilling® via XML API and a channel package can be assigned to the customer product together with a subscription plan for it (just like for any other service, such as internet telephony, messaging, or data transfer). This allows you to do better marketing, work with multiple customer groups, and enjoy greater flexibility in terms of pricing the service.

When a new or existing customer signs up for the IPTV service, the available channel information (based on the assigned channel package) is provisioned into the IPTV platform via an extensible XML API. Also, if a customer's product configuration changes, or a customer is blocked or suspended (e.g. due to non-payment), this information is transferred to the IPTV platform.

Support for the pay-per-view service will be introduced in a future release, at which time when a customer requests pay-per-view content, it will be validated in real time – if he has enough funds available – and the cost is debited from his account once he confirms the purchase.

As a result, the IPTV service is fully managed via the PortaBilling® web interface, and all applicable charges are added to the customer's invoice, along with other charges (periodic and event-based), for services such as internet access, voice calls, and so on. This enhances the customer's experience, improves accounts receivable tracking, simplifies maintenance, and reduces operating costs.

Currently the Matrix IPTV and Minerva platforms are supported.

The combination of an IPTV platform and PortaBilling® creates a worldclass video ingest, storage, distribution and delivery platform with a robust, high-quality video functionality. Easy provisioning and full control on the billing side allow you to reduce operating costs and quickly achieve profits from IPTV services.

Automatic Backup System

Now you can easily configure a backup procedure to make sure that the most critical data on your installation is duplicated.

The "Archivist" feature is on the Configuration Server web interface where you can configure backup for the following data:

- MySQL database (hot backups, performed while the database is running, will not block normal database operations)
- Cassandra database (storage for invoices, xDRs, reports, etc.)
- Recorded phone conversations
- General configuration for the server's operation system (/etc folder)
- Applied custom modifications (deposit files)
- Custom RPM files
- Billing statistics
- Voice prompt files

Backup										
Tasks			kup Source	Schedule			Bac	Backup Destination		
		15 JI 12 SI		Collapse		Run Now	🛃 Logs			
🗉 Default		۲	configurator		Minute:	0	×	ΞĿ	ocal	
Backup Cassandra	(0)		master		Minute.	U	•		configurator	rsync
Backup MySQL database	(0)		replica		Hour:	4	~		master	rsync
Call recordings	(1)		sip						replica	rsync
Backup /etc	(0)		media		Day:		×		sip	rsync
Backup Deposits	(0)	٠	web		5071				media	rsync
Backup statistics	(0)				Month:		~		web	rsync
Backup prompts	(0)									
Backup custom rpms	(0)				Deadline:	120	*			
Create backup of converted call recordings, located in: - /porta_var/porta-cal-recording-" /cal-recording/wav (This task must run on CallRecording server)					The result of y 04:00 every d The next back 19.12.2013 a	lay up will be perform	ed:			
Save										
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Configuration is easy and intuitive.

- 1. In the **Tasks** panel select the data which you want to backup (e.g. Call recordings)
- 2. In the **Backup Source** panel mark the servers where this data is located (e.g. select SIP if your recorded phone conversations are located on this server)
- 3. In the **Schedule** panel configure a time frame for the operation (on the screenshot above, backup is scheduled to be executed at 4 A.M. every day). The **Deadline** parameter assigned for the backup procedure specifies time in minutes. This will ensure that the procedure stops before the off-peak period ends (if there is too much data to be backed up within one off-peak period.)
- 4. In the **Backup Destination** panel select one server where files with backup data will be placed.
- 5. Press the **Save** button.

You can manually run the backup procedure by pressing the **Run Now** button. After that you can check **Logs** to see details of the backup procedure execution.

Note that in this release the automatic backup system checks the availability of free space required to make a backup (e.g. copy the database) only on the source server. So please, make sure that there is enough free space on the destination server. This will be improved and new functionality will be added in future releases.

Data recovery

Automated data recovery will be implemented in future releases. For now the recovery procedure can be manually executed from the CLI (command-line interface.) Please contact **support@portaone.com** for more information on recovery procedures.

Improved Protection from DoS Attacks

Denial-of-Service (DoS) attacks are fairly common in the VoIP world and a service provider must take proactive measures to ensure that service is not affected. The PortaSIP DoS prevention feature utilizes the server's built-in firewall to prohibit network traffic coming from specific IP address once it sends too many requests (beyond the reasonable amount that would be generated by a legitimate SIP phone, proxy or gateway). The management interface for the module has been improved and is now really easy to configure via the Configuration Server web interface.

Configuration "Configure DoS Protection"	infor	mation		×					
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Configuration Tree +	Gro	Groups							
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😠 🏐 ClusterSuite	1	in SipProtector							
🗄 🏐 IMGate	/PortaSwitch/PortaSIP/I:porta-sip-1@sip/G:SipProtector								
🗎 🎱 Admin	±	INVITE_rate	-1						
BillingEngine	٠	OPTIONS_rate	-1						
B () DB B () LogServer	۰	REGISTER_rate	-1						
Operation Operation Operation Operation Operation Operation Oper	±	enabled	Yes	9					
- 🖗 RT	۲	filter_action	DROP						
🖃 🏐 PortaSIP	Ξ	overall_rate	100	٦					
i porta-sip-1@sip - in-porta-sip-2@sip ⊕ [™] PortaUM		Maximum allowed rate for arbitrary SIP packets per minute per host. Set '-1' to disable.							

You may now configure the maximum amount of SIP requests that will be accepted from every IP phone, or set a limit for INVITE / OPTIONS / REGISTER SIP requests separately. SIP requests that go above the limit can be dropped or logged for future investigation.

You can increase the security of your network and prevent service outages because of a SIP request flood (whether intentional or unintentional.) Future releases of this feature will be improved to provide white lists and message flooding monitoring.

Column Recognition During Rate Upload

The rate upload wizard is now more accurate in column recognition when uploading new rates into a tariff.

The rate upload wizard's recognition algorithm has been improved. Now during column assignment the system analyzes the type of value for the first ten rows of each column. Then the system compares the received results and defines the most suitable position for each column label. Even when there are no headers (specified in an uploaded file) on some or even all columns, the system will associate the column labels with the appropriate columns according to the content analysis of each column in the uploaded file.

With improved column recognition during the rate upload, administrators will save time while checking for accuracy and adjusting column label definitions.

Improvement of the New Self-care Performance

Due to improvements made within this release, the New Self-care interface loading time has been substantially decreased.

The refactoring and optimization of the code has been performed. As a result, the response time of the self-care portal (especially during the initial load) has been significantly improved.

The decreased speed of loading the New Self-care interface will certainly improve your customers' user experience.

Improvement of Call Forwarding Configuration

Prior to MR38, during call forwarding configuration it was possible to specify an account ID that contained symbols such as 0-9, a-d, A-D, "*" or "#."

Now it is possible to specify an account ID that contains any alphanumeric symbol.

This improvement in specifying the call forwarding destination will be useful for end users who have aliases other than just a number or an IP address.

Several New API Methods Added

New API methods for managing data related to destinations, authentication info for connections to a vendor and virtual environment have been added.